FACT SHEET

as required by LAC 33:IX.3111 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0066621; AI 19082; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Town of Vinton
Vinton Treatment Plant
1200 Horridge Street
Vinton, Louisiana 70668

II. **PREPARED BY:** Todd Franklin

DATE PREPARED: January 9, 2009

III. **PERMIT ACTION:** reissue LPDES permit LA0066621, AI 19082; PER20080001

LPDES application received: October 23, 2008

EPA has not retained enforcement authority.

Previous LPDES permit effective: November 1, 2003
Minor Modification effective: January 1, 2005

- A reduction in monitoring frequencies for pH from 2/week to 1/week
- The addition of the TRC definition to the effluent limitations page
- A change in sample type for BOD_5 and TSS from 6 hour composite to grab for Outfall 001B during rainfall events
- Minor changes to storet codes for biomonitoring requirements on the effluent limitaitons and monitoring requirements page and Section D: Chronic Biomonitoring Requirements, Freshwater

Previous LPDES permit expired: October 31, 2008

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Vinton.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at 1010 Wastewater Avenue on the east side of the Town of Vinton, Calcasieu Parish.

D. The treatment facility consists of a one-cell oxidation pond followed by a 36.8 acre overland flow treatment system. Disinfection is by chlorination in a chlorine contact chamber followed by dechlorination by SO_2.

E. Outfall 001A & 001B*

Discharge Location: Latitude 31° 11' 46" North
Longitude 93° 33' 32" West

Description: treated sanitary wastewater

Design Capacity: 2.3 MGD

Type of Flow Measurement which the facility is currently using:

Totalizing Meter / Continuous Recorder

* Outfall 001 is used for both sanitary wastewater during normal conditions and will be called 001A and treated sanitary wastewater commingled with stormwater runoff during rain events and will be called 001B.

V. RECEIVING WATERS:

The discharge is into a parish drainage ditch; thence into Coon Gully; thence into the Vinton Drainage Canal in Subsegment 110601 of the Sabine River Basin, defined at LAC 33:IX.1123.Table 3 as *Vinton Waterway-from Vinton to ICWW*. Subsegment 110601 is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of Coon Gully is 1.07 cfs.

The **hardness value** is 33.7 mg/l and the **fifteenth percentile value for TSS** is 9.1 mg/l.

The designated uses and degree of support for Subsegment 110601 of the Sabine River Basin are as indicated in the table below[1/]:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

[1/] The designated uses and degree of support for Subsegment 110601 of the Sabine River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 110601 of the Sabine River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008, from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

PRE-APPLICATION TREATMENT

The permittee utilizes an overland flow method for wastewater treatment. Overland flow systems are a method of land application and wastewater reuse capable of meeting advanced treatment levels. In this type of system, wastewater is applied at the top of a gently sloping terrain and allowed to flow over the

surface of the ground to the bottom where it is collected, disinfected, and discharged. However, municipal wastewater often contains rags, paper, hair and other large articles that can bind and clog orifices and valves in surface and sprinkler distribution systems. Therefore, pre-application treatment is required to prevent operating problems with the distribution system and nuisance conditions such as odor during storage.

It is the intent of this Office to protect in-stream conditions during times of critical or low flow. As such, LAC 33:IX.2311.A.1, requires permits for the discharge of pollutants from any point source into waters of the state. Since the application field is not included as waters of the state, effluent limitations and monitoring requirements will not be required for discharge to the application field. However, since the permittee utilizes a pond system for pretreatment, every attempt should be made to meet limitations equivalent to secondary treatment as established by LAC 33:IX.5905.A and B and LAC 33:IX.711.D.2.

POST-APPLICATION EFFLUENT LIMITATIONS

Overland flow systems provide advanced tertiary treatment to secondary treated wastewater. The wastewater is treated in the saturated top layer of the soil and by bacteria and algae attached to the vegetation. Wastewater is treated as it passes through the soil by filtration, adsorption, ion exchange, precipitation, microbial action, and plant uptake. In addition, microbes attached to the vegetation to extract nutrients. Overland flow systems provide significant reductions in BOD and TSS. Nitrogen is removed through nitrification/denitrification and crop uptake. Phosphorus removal is limited due to the minimum amount of percolation, but is held in the soil and serves to enrich the soil. Some wastewater is lost through evaporation and transpiration. Very little wastewater is passed onto the groundwater, due to the use of underlying impermeable soils. The remaining wastewater is collected at the bottom of the slope and discharged into nearby waters of the state. (*Process Design Manual for Land Treatment of Municipal Wastewater*, USEPA, US Army Corps of Engineers, and US Department of Agriculture, 1977)

OUTFALL 001A

Final effluent limitations shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	192	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	288	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
				limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Other Effluent Limitations

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations for Fecal Coliform Bacteria, the effluent shall contain NO MEASURBALE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, No MEASURABLE will be defined as less than 0.1 mg/l of chlorine. Limits set through BPJ in accordance with the previous LPDES permit and the Water Quality Screen (see Appendix B-1).

5) Biomonitoring

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD

shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0066621, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day survival & reproduction test using Ceriodaphnia dubia (Method 1002.0)	1/quarter*
Chronic static renewal 7-day survival & growth test using fathead minnow (Pimephales promelas) (Method 1000.0)	1/quarter*

* If there are no lethal effects demonstrated after the first year of quarterly testing, the permittee may certify fulfillment of the WET testing requirements in writing to the permitting authority. If granted, the monitoring frequency for the test species may be reduced to not less than once per year for the less sensitive species (usually *Pimephales promelas*) and not less than twice per year for the more sensitive species (usually *Ceriodaphnia dubia*). Upon expiration of the permit, the monitoring frequency for both species shall revert to once per quarter until the permit is reissued.

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 24%, 32%, 43%, 58%, and 77%. The low-flow effluent concentration (critical low-flow dilution) is defined as 77% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

See attached Biomonitoring recommendation for more information.

STORMWATER/RAINFALL RUNOFF CONDITIONS:

It is the goal of this Office to protect water quality uses and uphold water quality standards, especially during times of critical or low flow. Periods of rainfall runoff may not be considered critical conditions. However, during periods of rainfall all of the pretreatment wastewater may not infiltrate, may runoff, may pond in low areas, may erode, and may be washed to surface waters without adequate advanced treatment. On the other hand, the effluent BOD_5 and TSS concentrations during rainfall events have been similar to dry weather conditions. However, the mass discharge of these constituents may increase proportionally to both the intensity and duration of the rainfall event. In other words, heavy rainfall events can theoretically cause a violation of mass discharge limits, even though the monthly average limit may not actually have been violated.

Stormwater discharges for the permittee's treatment system are highly variable in terms of flow and the relationship between discharges and water quality in general can be complex, not lending itself to the existing methodologies for deriving numeric water quality-based effluent limitations. Considering design capacity of the facility and the area of the application field, a measured rainfall event was derived that would approach the facility's design capacity without exceeding the design capacity. For the Vinton Treatment Plant **inclement weather** shall be defined by the following equation:

Application field	=	36.8 acres
1 acre	=	43,560 ft^2
Area	=	36.8 acres X 43,560 ft^2/acre = 1,603,008 ft^2
Volume	=	area X depth
	=	1,603,008 ft^2 X 2.3"/12"
cubic feet/sec	=	$\frac{\text{volume}}{\text{24 hr/day X 3600 s/hr}}$
	=	$\frac{306{,}720\ ft^3}{\text{24 hr/day X 3600 s/hr}}$
	=	3.55 cfs
MGD	=	3.55 cfs X 0.646 (conversion factor)
	=	2.3 MGD (design capacity of the facility)

Given the area of the application field, it was determined that a rainfall event of 2.3" would equal approximately the volume of wastewater capable to being treated, or design capacity, of the facility. Therefore, **any rainfall event of at least 2.3", per episode of rainfall, shall be considered inclement weather.** When wastewater is applied to the application field during inclement weather (a rainfall event of at least 2.3"), the Town of Vinton will suspend the discharge to the application field when practical. A rain gage is required to measure the amount of rainfall. Rainfall measurement for episodes of inclement weather exceeding 2.3" must be included in the comment section of the DMR.

Prior to an inclement weather event, the field will already be partially saturated from pretreated wastewater. (See Part II, Section E.2.c, Management Requirements for practicality of suspending discharge to the application field, rainfall measurement, and stormwater/rainfall runoff sampling.)

Once the rain has stopped, time for runoff to reach the receiving stream (lag time) was calculated using the following equation:

T = distance / flowrate

T = 2,360 ft / 0.25 ft/s

T = 9,440 min / 60 s/min

T = 157.3 minutes

T = 2 hours, 23 minutes

Discharge to the application field should not resume until 2 hours, 23 minutes following an episode of inclement weather. **However, if the facility must discharge to the application field during periods of inclement weather, the permittee will be required to meet the discharge limitations for Outfall 001B.** Parameters to be analyzed are outlined in the following table.

OUTFALL 001B

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	---	10 mg/l	15 mg/l	Limits are set in accordance with the SSELP
TSS	---	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact

Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations for Fecal Coliform Bacteria, the effluent shall contain NO MEASURBALE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, No MEASURABLE will be defined as less than 0.1 mg/l of chlorine. Limits set through BPJ in accordance with the previous LPDES permit and the Water Quality Screen (see Appendix B-1).

X. PREVIOUS PERMITS:

LPDES Permit No. LA0066621: Effective: November 1, 2003
Expired: October 31, 2008

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Outfall 001A				
Flow	Report	Report	Continuous	Recorder
BOD_5	192 lb/day / 10 mg/l	15 mg/l	2/week	6 Hour Composite
TSS	288 lb/day / 15 mg/l	23 mg/l	2/week	6 Hour Composite
TRC	less than 0.1 mg/l at any one time		2/week	Grab
Fecal Coliform Colonies/100 ml	200	400	2/week	Grab
pH	Range (6.0 su – 9.0 su)		1/week	Grab
Biomonitoring				
Pimephales promelas	Report	Report	1/quarter	24 Hour Comp.
Ceriodaphnia dubia	Report	Report	1/quarter	24 Hour Comp.
Outfall 001B				
Flow	Report	Report	Continuous	Recorder
BOD_5	10 mg/l	15 mg/l	1/discharge	Grab
TSS	15 mg/l	23 mg/l	1/discharge	Grab
TRC	less than 0.1 mg/l at any one time		1/discharge	Grab
Fecal Coliform				

Colonies/100 ml	200	400	1/discharge	Grab
pH	Range (6.0 su – 9.0 su)		1/discharge	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following most recent inspections performed for this facility.

Date – September 27, 2006
Inspector – LDEQ
Findings and/or Violations –

- A records review revealed that the facility was issued a CONOPP (CN-06-0174) on August 30, 2006, for several exceedances from a DMR review from April 2005 to June 2006. The DMRs for July 2006 and August 2006 were reviewed and no exceedances were found.
- Facility collects samples and delivers them to Chemtec in Sulphur.
- The pH sample is not analyzed immediately after collection.
- Effluent is light green.
- Currently, the automatic composite sampler is inoperable. Facility is manually collecting composite samples.

Date – September 15, 2008
Inspector –LDEQ
Findings and/or Violations –

- Inspection was performed to assess issues related to Hurricane Ike.
- Facility was currently operating.
- Facility had lost power for approximately two hours.
- There was no damage and no release of untreated sanitary wastewater.
- Facility did not flood.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Consolidated Compliance Order & Notice of Potential Penalty (CCONPP)
Enforcement Tracking No. WE-CN-08-0543
Date Issued – November 13, 2008
Findings of Fact:

1. The Respondent owns and/or operates a POTW consisting of an overland flow treatment facility which is located on Williams Road between I-10 and US Hwy. 90, in Vinton, Calcasieu Parish, Louisiana. LPDES permit LA0066621 was issued to the Respondent on September 30, 2003, with an

effective date of November 1, 2003, and an expiration date of October 31, 2008. A minor modification to this permit was issued to the Respondent on December 13, 2004, with an effective date of January 1, 2005, and an expiration date of October 31, 2008. The LPDES permit authorizes the Respondent to discharge treated sanitary wastewater from its facility into a parish drainage ditch; thence into Coon Gully; thence into the Vinton Drainage Canal; thence into the Intracoastal Canal, all waters of the state.

2. The Respondent was issued CCONPP WE-CN-05-0244 on July 25, 2005, for the following violations: failure to maintain adequate records, failure to operate and maintain equipment, failure to follow approved sampling procedures, failure to submit accurate and/or complete Discharge Monitoring Reports (DMRs), failure to follow approved test methods, and effluent violations. The Compliance Order mandated the Respondent to take any and all steps necessary to meet and maintain compliance with LPDES permit LA0066621, to submit properly completed DMRs, to submit a written response to the CCONPP, and to submit a comprehensive plan for the expeditious elimination and prevention of noncomplying discharges. A written response was received on August 23, 2005. CCONPP WE-CN-05-0244 is a final action of the Department and is not subject to further review.

3. On August 30, 2006, CCONPP WE-CN-06-0174 was issued to the Respondent. The relevant violations of the Compliance Order were failure to submit a comprehensive plan for the expeditious elimination and prevention of noncomplying discharges, and effluent exceedances. The relevant requirements of the Compliance Order were to: meet and maintain compliance with LPDES permit LA0066621, specifically to operate within permit limits, submit a comprehensive plan for expeditious elimination and prevention of noncomplying discharges and the noted deficiencies, and submit a complete written report including a detailed description of the circumstances of the cited violations, the actions taken to achieve compliance, and corrective or remedial actions taken to mitigate any damages resulting from the violations. On September 20, 2006, the Department received from the Respondent a written response to CCONPP WE-CN-06-0174. CCONPP WE-CN-06-0174 is a final action of the Department and not subject to further review.

4. A file review on September 18, 2008, revealed that the Respondent did no submit a renewal application 180 days prior to the expiration date of LPDES permit LA0066621. LPDES permit LA0066621 expired on October 31, 2008.

5. A file review on September 18, 2008, revealed permit exceedances, as reported by the Respondent on DMRs. From September 2006 through July 2008, there were eight (8) BOD_5 effluent violations and fourteen (14) TSS effluent violations reported on DMRs. Additionally, the Respondent failed to submit noncompliance reports (NCRs) to the Department for the above effluent exceedances.

6. A file review on September 18, 2008, revealed that the Respondent failed to submit the Summary Tables for results of valid biotoxicity tests for Outfall TX1Q for the following monitoring periods: 07/2006-09/2006, 10/2006-12/2006, 01/2007-03/2007, 04/2007-06/2007, 07/2007-09/2007, 10/2007-12/2007, 01/2008-03/2008, and 04/2008-06/2008.

7. An inspection on September 27, 2006, revealed that the Respondent failed to properly operate and maintain its treatment system. Specifically, the pH sample is not analyzed immediately after collection, and the effluent was light green in color.

Order:

1. To immediately take any and all steps necessary to meet and maintain compliance with the permit limitations and conditions contained in LPDES permit LA0066621, including but not limited to operate within permit limits, submitting Summary Tables for valid biotoxicity tests conducted, properly operating and maintaining system, and submitting an LPDES permit application.

2. To submit the Summary Tables for the valid biotoxicity tests conducted as mentioned in Paragraph 4 of the Findings of Fact listed above.

3. To submit a completed LPDES permit application.

4. In the event the Respondent believes that complete correction of the above cited deficiencies is not physically possible within thirty (30) days, the Respondent shall submit a comprehensive plan for the expeditious elimination and prevention of such noncomplying discharges.

C) DMR Review

A review of the discharge monitoring reports for the period beginning September 2006 through August 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
BOD_5, Monthly Avg.	001A	September 2006	10 mg/l	12.5 mg/l
BOD_5, Monthly Avg.	001A	November 2006	10 mg/l	11.75 mg/l
TSS, Monthly Avg.	001A	November 2006	15 mg/l	16.5 mg/l
TSS, Monthly Avg.	001A	December 2006	15 mg/l	18 mg/l
TSS, Weekly Avg.	001A	April 2007	23 mg/l	26 mg/l
TSS, Monthly Avg.	001A	November 2007	15 mg/l	16.75 mg/l
TSS, Weekly Avg.	001A	November 2007	23 mg/l	29.5 mg/l
TSS, Monthly Avg.	001A	January 2008	288 lbs/day	302.47 lbs/day
TSS, Monthly Avg.	001A	January 2008	15 mg/l	20.62 mg/l
TSS, Weekly Avg.	001A	January 2008	23 mg/l	33.5 mg/l
TSS, Monthly Avg.	001A	March 2008	15 mg/l	18 mg/l
BOD_5, Monthly Avg.	001A	April 2008	10 mg/l	11.5 mg/l

BOD_5, Weekly Avg.	001A	April 2008	15 mg/l	16.5 mg/l
TSS, Monthly Avg.	001A	April 2008	15 mg/l	26 mg/l
TSS, Weekly Avg.	001A	April 2008	23 mg/l	31.5 mg/l
BOD_5, Monthly Avg.	001A	May 2008	192 lbs/day	225.94 lbs/day
BOD_5, Monthly Avg.	001A	May 2008	10 mg/l	17 mg/l
BOD_5, Weekly Avg.	001A	May 2008	15 mg/l	17 mg/l
TSS, Monthly Avg.	001A	May 2008	288 lbs/day	728.83 lbs/day
TSS, Monthly Avg.	001A	May 2008	15 mg/l	55 mg/l
TSS, Weekly Avg.	001A	May 2008	23 mg/l	55 mg/l
BOD_5, Monthly Avg.	001A	July 2008	10 mg/l	14.5 mg/l

XII. ADDITIONAL INFORMATION:

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L $CBOD_5$ and 2 mg/L NH_3-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 2.3 MGD.

Effluent loadings are calculated using the following example:

BOD_5: 8.34 gal/lb x 2.3 MGD x 10 mg/l = 192 lbs/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling for normal conditions (exclude only the rain events above 2.3" when wastewater is applied to the application field)** as shown in the permit are standard for facilities of flows between 1 MGD and 5 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Outfall 001A		
Flow	Continuous	Recorder
BOD_5	2/week	6 Hr. Composite
Total Suspended Solids	2/week	6 Hr. Composite
TRC	2/week	Grab
pH	1/week	Grab
Fecal Coliform Bacteria	2/week	Grab
Biomonitoring		
Ceriodaphnia dubia (Method 1002.0)	1/quarter	24 Hr. Composite
Pimephales promelas (Method 1000.0)	1/quarter	24 Hr. Composite

The pH monitoring frequency is based on the previous permit minor modification, effective on January 1, 2005. Since there has been no pH exceedances noted since

the time of the modification, the monitoring frequency shall continue.

The **Monitoring Requirements, Sample Types, and Frequency of Sampling for rainfall events (only during rain events above 2.3" when wastewater is being applied to the application field)** are as follows:

Outfall 001B		
Flow	Continuous	Recorder
BOD_5	1/discharge	Grab
Total Suspended Solids	1/discharge	Grab
TRC	1/discharge	Grab
pH	1/discharge	Grab
Fecal Coliform Bacteria	1/discharge	Grab

MANAGEMENT REQUIREMENTS

In accordance with LAC 33:IX.2701.E and LAC 33:IX.2707.K.3, the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Therefore, the permittee shall develop and implement a Management Requirement Plan which shall address (1) maintenance and operation of the facility and (2) maintenance and operations of the application field.

General and specific requirements of the plan will be designed to prevent or minimize potential for the release of pollutants from ancillary activities; including material storage areas, plant site runoff, in-plant transfer, process and material handling areas, loading and unloading operations, water treatment areas, and operation and maintenance of equipment to the waters of the State through site runoff, spillage or leaks, wastewater disposal, or drainage from raw material storage areas. Specific conditions of the plan will be designed to assure the facility provides optimal treatment with optimal efficiency, including: wastewater storage, buffer zones, disinfection, vegetation, distribution, and terrace slope maintenance.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Stormwater Discharges

Because the design flow of the facility is equal to or greater than 1.0 MGD and in accordance with LAC 33:IX.2511.B.14.i, the facility may contain storm water discharges associated with industrial activity. Therefore, in accordance with LAC 33:IX.2511.A.1.b, specific requirements addressing stormwater discharges will be included in the discharge permit.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2007.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 3, "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, April 16, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards"; Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Low-Flow on Streams in Louisiana, Fred N. Lee for the Louisiana Department of Environmental Quality, Office of Water Resources, Engineering Section, March 2000.

Process Design Manual for Land Treatment of Municipal Wastewater, U.S. Environmental Protection Agency, Office of Water Program Operations; U.S. Army Corps of Engineers; and U.S. Department of Agriculture, October 1977.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Vinton, Vinton Treatment Plant, October 23, 2008.